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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b>  <small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>	Attorney Docket No.	04144.P001
	First Inventor or Application Identifier	Philip Smith Becker, Jr.
	Title	METHOD AND APPARATUS FOR ONLINE GEOGRAPHIC AND USER
	Express Mail Label No.	EM014067064US

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents	<b>ADDRESS TO:</b> Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
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|--|--|
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g. PTO/SB/17)<br>(Submit an original, and a duplicate for fee processing)<br>2. <input type="checkbox"/> Applicant claims small entity status.<br>See 37 CFR 1.27.<br>3. <input checked="" type="checkbox"/> Specification <span style="float: right;">Total Pages <input type="text"/></span><br>(preferred arrangement set forth below)<br>- Descriptive title of the Invention<br>- Cross References to Related Applications<br>- Statement Regarding Fed sponsored R & D<br>- Reference to sequence listing, a table,<br>or a computer program listing appendix<br>- Background of the Invention<br>- Brief Summary of the Invention<br>- Brief Description of the Drawings (if filed )<br>- Detailed Description<br>- Claim(s)<br>- Abstract of the Disclosure<br>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <span style="float: right;">Total Sheets <input type="text" value="3"/></span><br>5. Oath or Declaration <span style="float: right;">Total Pages <input type="text" value="3"/></span><br>a. <input type="checkbox"/> Newly executed (original copy)<br>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))<br>(for continuation/divisional with Box 16 completed)<br>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br>Signed statement attached deleting<br>inventor(s) named in the prior application,<br>see 37 CFR 1.63(d)(2) and 1.33(b).<br>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76. | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or<br>Computer Program (Appendix)<br>8. Nucleotide and/or Amino Acid Sequence Submission<br>(if applicable, all necessary)<br>a. <input type="checkbox"/> Computer Readable Form (CFR)<br>b. <input type="checkbox"/> Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br>ii. <input type="checkbox"/> Paper<br>c. <input type="checkbox"/> Statement verifying identity of above copies |
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**ACCOMPANYING APPLICATION PARTS**

- |   |  |
|---|--|
| 9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s))  |  |
| 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney<br>(when there is an assignee) |  |
| 11. <input type="checkbox"/> English Translation Document (if applicable)   |  |
| 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO - 1449 <input type="checkbox"/> Copies of IDS Citations |  |
| 13. <input type="checkbox"/> Preliminary Amendment  |  |
| 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br>(Should be specifically itemized)                 |  |
| 15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br>(if foreign priority is claimed)                         |  |
| 16. <input type="checkbox"/> Other:   |  |

17. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment:  
☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_/\_\_\_\_\_

Prior application Information: Examiner \_\_\_\_\_ Group/Art Unit: \_\_\_\_\_  
 For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

☒ Customer Number of Bar Code Label



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Signature		Date	11/17/2000

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**FEE TRANSMITTAL**  
**for FY 2001**

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$) 910.00**Complete if Known**

Application Number	
Filing Date	
First Named Inventor	Philip Smith Becker, Jr., et al.
Examiner Name	
Group Art Unit	
Attorney Docket Number	04144.P001

**METHOD OF PAYMENT** (check one)

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number 02-2666

Deposit Account Name Blakely, Sokoloff, Taylor &amp; Zafman LLP

- ☒
- Charge Any Additional Fee Required Under 37CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

- 2.
- ☒
- Payment Enclosed:

☒ Check ☐ Money Order ☐ Other**FEE CALCULATION****1. FILING FEE**

Large Entity Code	Large Entity Fee (\$)	Small Entity Code	Small Entity Fee (\$)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	\$710
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	
<b>SUBTOTAL (1)</b>					<b>(\$ 710.00)</b>

**2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
17	-20** = 0	X \$18.00 =	0.00
5	-3** = 2	X \$80.00 =	160.00

**Large Entity Small Entity**

Large Entity Code	Large Entity Fee (\$)	Small Entity Code	Small Entity Fee (\$)	Fee Description	Fee Paid
103	18	203	9	Claims in excess of 20	
102	80	202	40	Independent claims in excess of 3	
104	270	204	135	Multiple Dependent claim	
109	80	209	40	**Reissue independent claims over original patent	
110	18	210	9	**Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>					<b>(\$ 160.00)</b>

\*\*or number of previously paid, if greater; For Reissues, see above

**FEE CALCULATION** (continued)**3. ADDITIONAL FEE**

Large Entity Code	Large Entity Fee (\$)	Small Entity Code	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for response within first month	
116	390	216	195	Extension for response within second month	
117	890	217	445	Extension for response within third month	
118	1,390	218	695	Extension for response within fourth month	
128	1,890	228	945	Extension for response within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidably	
141	1,240	241	620	Petition to revive - unintentionally	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
Other fee (specify)					
<b>SUBTOTAL (3)</b>					<b>(\$ 40.00)</b>

\* Reduced by Basic Filing Fee Paid

**SUBMITTED BY**

Typed or Printed Name

Eric S. Hyman, Reg. No. 30,139

Signature

Date

11/17/2000

**Complete (if applicable)**

Reg. Number

Deposit Account User ID

02-2666

## **Method and Apparatus for Online Geographic and User Verification and Restriction Using a GPS System**

In many states and counties, online wagering is restricted to specific locations and to certain people. Typically, local laws require that the bettor be of legal age, be in a “suitable” mental state, and be located in a specific geographic area that does not prohibit gambling and/or online wagering. Typically, an online wagering system works as follows:

1. User browses to the online wagering site.
2. User selects a desired wagering proposition and wager amount, and then transmits his selection to the wagering host.
3. If the user has not previously logged in during this session, the system prompts him to do so at this time.
4. The system verifies the location and identification of the user.
5. If the location and identification are acceptable, the wager is accepted.
6. The system notifies the user that the wager has been accepted.
7. Repeat steps 2 through 6 as desired.

The invented online bettor location and verification system is used to perform step 4 as well as an additional step to ensure that the user is of proper mental state to wager.

### **Summary of the Invention**

The invented online bettor location and verification system is to satisfy the geographic and identification requirements demanded of wagering governing bodies such as the Nevada Gaming Commission. In general these governing bodies require that any computer-based wagering system must verify that a bettor is who the bettor says he is and where the bettor says he is before the system will accept a wager.

Specifically the invented online bettor location and verification system will:

Verify that the better is in a legal location to place a wager.

Verify the identity of the bettor

Determine whether the bettor is of acceptable state of mind for wagering.

Prevent potential users from defeating or bypassing (“spoofing”) the system.

Establish a reliable and secure link between the user’s computer and the host betting site.

**Brief Description of the Drawings**

Figure 1 is a block overview diagram showing a system in which the invention may be utilized.

Figure 2 is a flowchart showing the overall operation of the invention.

Figure 3 is a diagram show the flow of data during operation of the system in which the invention is utilized.

**Detailed Description of the Invention**

Referring first to Figure 1, the invented online bettor location and verification system includes several components. These include a peripheral hardware device (the "PHD") 11 that in one embodiment attaches to a bettor's personal computer, personal digital assistant, wireless phone or internet appliance (PC) 13 and a software application that resides on a wagering host system 15 that communicates over a communications network 17 such as the Internet with both the PHD and the user's PC in order to validate logons, accept and process bets from bettors. The user's PC is linked to the wagering host via either the Internet or a direct connection and uses any industry-standard browser to communicate with the host. There is no special software resident on the personal computer other than "applets" that are automatically downloaded by the host as needed and a "driver" for the PHD. These software components are in the nature of Java™ programs, browser plug-in applications, ActiveX™ components or other software technologies to perform certain functions. Their specific implementation details are not needed for an understanding of the invention, and in any event implementation details of such applets and driver are well within the abilities of a person of ordinary skill in the art.

The PHD is linked to the wagering host via the Internet or a direct connection or a closed-loop network and communicates with the host as described below.

The overall operation of the invented online bettor location and verification system is shown in Figures 2 and 3. After accessing an online wagering site:

(1) The user initiates the logon process either by explicitly sending a logon request or by trying to make a wager at step 47 before he is logged on. The PC encrypts the request by use of an applet and sends it to the host at step 49.

(2) In either case, the host checks to see if the user is already logged on at step 51. If not, the host sends a message to the user's browser asking the user to enter a personal identification number (PIN) at step 21.

(3) The user enters his PIN, which is encrypted and sent back to the host at step 25. The specifics of the encryption performed are not necessary for an understanding of the invention, and any one of numerous well known encryption algorithms may be employed. The encrypted data is received at the host and decrypted at step 27. The host then validates the PIN at step 29. If this is an invalid PIN the wager or logon request is rejected.

(4) In order to ensure that the user is at the location of the PHD and is also in a proper mental state to wager, the host generates a random sequence of colors or symbols for each of the keys on the PHD device at step 31. The host also generates a random sequence of colors or symbols that will identify the keys on the PHD at step 31. The sequence is encrypted and sent to the PHD, which decrypts the data at step 33.

(5) The encrypted sequence is also sent to the PC at step 35, where it is decrypted and displayed on the user's screen at step 37.

(6) The user enters the sequence that was displayed on the PC screen into the keypad on the PHD at step 39. After each key is entered, the colors or symbols associated with the individual keys on the PHD are changed based on the change sequence that was sent in step 31. The resulting sequence of keystrokes is combined with the serial number that is built into the PHD and with the current location of the PHD, which is determined by the GPS module within the PHD. This information is encrypted and sent to the host at step 41. The host decrypts the information at step 43 and performs several checks at step 45. Specifically, it checks the PHD's serial number to ensure that the user is accessing the system using a device assigned to that user as explained below. In addition at step 45, the host verifies that the GPS device – and therefore the user who entered the keystrokes into the PHD – are in a geographical location that permits on-line wagering. Also at step 45, the host decrypts the sequence and compares the received sequence to the sequence which was sent. If there is a match at step 45, the host approves the logon.

(7) The host sends a message to the user which is displayed on the monitor of the PC that he is permitted to enter a wager.

(8) The user enters the wager which the PC encrypts and transmits to the host.

The invented online better location and verification system operates to ensure that the better's personal computer is in a state or country that allows the wagering that the

bettor intends to engage in. The location is established by utilizing a GPS device built into the PHD. The PHD connects to the user's personal computer through the PC's serial, USB, FireWire, mouse, keyboard or similar port and receives electrical power via that port. In one embodiment, and referring again to Figure 1, it uses the US Government's GPS satellites 19 to identify the location of the bettor with an accuracy of a few meters. The satellites transmit spread spectrum signals in accordance with a set of prescribed codes as described, for example, in U.S. Patent No. 5,757,916. Other GPS transmitters such as the Nationwide differential GPS service, NDGPS, could also be used. The GPS device is typically implemented as GPS system chip 61 which determines the longitude and latitude of the PHD based on signals received from satellites 19. The PHD transmits this information to the host 15 via the Internet or a closed-loop network. A suitable GPS system chip is available from Philips as its part no. UAA1570HL and SAA1570HL. The host will then use this information to ensure that the PHD is in a legal location to place a wager using a database that defines legal geographic locations.

The invented online bettor location and verification system also verifies that the user is physically at the location of the PHD 11 and personal computer 13 and not operating the computer from a remote location. This is accomplished by having the host software send a unique, random key such as a sequence of several colors or symbols to the PHD at the start of a logon sequence as described above. This sequence is also sent to and displayed on the screen of the user's personal computer. The user must then enter the key directly into PHD keypad 63, using, for example, a color-coded keypad, which is part of the PHD. In a preferred embodiment using a sequenced color or symbol key, after each color or symbol is entered by the user, the colors or symbol of the input keys incorporate different color or symbol LEDs which cause the keys to display a different color or symbol which must be pressed in the correct sequence and within a set period of time, so it will be very difficult to perform this process by remote control. For example, if the sequence is four colors: red, blue, yellow, green, the keys may initially display green, red, yellow, blue. When the user pressed the second or red key, then the keys change their display, to for example, green, yellow, red, blue requiring the user to then press the fourth or blue key. The keys then change color again after the blue key is depressed. If the keys are pressed within the set time, the PHD sends the sequence, along with its serial number and location information provided by the GPS chip to the host. If the keys are not pressed within the set time, a message so indicating along with the serial

number and location information is sent to the host. This process also enables the system to ensure that the bettor is in a proper state of mind to gamble as explained below. If the user is unable to log on after a predetermined number of consecutive attempts, his account will be automatically suspended for a period of time and a message sent to the system operator. A successful logon while using this system will assure that the user is actually at the location of the PHD and is in a proper mental state to place a bet.

Since the GPS system identifies the location of the PHD for the host and the keystroke entries sent from the PHD to the host show that the bettor who entered the PIN is at the PHD, the location of the bettor can be assured. The location of the PC 13 is also assured to be the same as the PHD because a serial or USB connection requires a relatively short cable between the two connected devices.

The invented online bettor location and verification system also validates the identity of the user. This is accomplished by combining two steps. First, the prospective bettor must initially appear in person at a casino with whom he plans to bet and open an online wagering account. He must identify himself and prove that he is of legal age to wager by showing an acceptable identifying document such as a passport or local driver's license. (This step is required by law in Nevada.) At that time, the user will be issued both a PHD device and a Personal Identification Number (PIN). Each PHD contains a unique built-in serial number, which will be entered into the wagering host database along with the user's name and wagering account information.

The invented system will permit the system operator to select one of two options to assure that the bettor continues to be located at the site of the PHD. This prevents the user from having someone sign on for the bettor at the PHD and then remotely taking control of the computer and place wagers from an unknown, remote location.

With the first option, each time the user places a wager, the system host 15 will transmit a sequence of colors to the user's PC screen 13, which the bettor will have to enter by using the PHD's keypad 63 in exactly the same process as the user accomplished during the logon. If the user does not respond within a predetermined time, the system will not accept the wager.

The second option is similar to the first option, except that the host 15 sends a sequence of colors to the user's PC screen 13 at random time intervals. The user must respond in the same fashion as during logon by entering the colors or symbols by using

the PHD's keypad 63 within a predetermined time. If at any time the user does not respond within the allowed timeframe, the user will be disconnected from the system.

All logon and wagering-related communication is encrypted using well-known techniques such as 128-bit Secure Socket Layer technology that is part of today's PC systems and is used to secure financial transactions over the net.

All PHD-host communication use private key encryption. Each PHD is assigned a unique 128-bit key, which is stored in flash memory 69 and is inaccessible to the rest of the world. The host has a table of the keys for each of the PHDs that may be linked to the user's PIN. When the user logs in, the host will then know what code to use to encrypt/decrypt all communications with the PHD. Because the encryption is tied to the user's specific PHD, this communication session will only work if the person who logged in has the PHD that was issued to the person who was given that PIN. Further, since the serial number information is encrypted, a user cannot fool the host with software running on the PC since communications from the PHD must include the encrypted serial number.

Since the PHD unit itself will encrypt and decrypt all of these communications, and since the host will only be able to talk with the PHD if it belongs to the person who logged in, it will be virtually impossible to break or spoof this link. This is accomplished by having the host software send a unique key such as a sequence of several colors to the PHD. This sequence is also sent to and displayed on the screen of the user's personal computer. The user must then enter the key directly into PHD keypad 63 by use of a color-coded keypad that is part of the PHD as described above. This will create a secure bi-directional communication path between the PHD and the host.

The system also deters bettors who are under the influence of drugs or alcohol by requiring the user to enter the sequence of colors or symbols into the keypad where the keys are changing colors or symbols after each keystroke. The response must be completed within a predetermined time, or it will "time out" and be deemed a failed logon attempt. Using a predetermined time of, e.g., ten seconds, such a process is extremely difficult to accomplish by an intoxicated or drugged user due to the necessary reaction time required. Moreover, the user's account will be temporarily disabled for a period of time after a predetermined number of consecutive failures to login, so the system will prevent an unsuitable bettor from repeatedly trying to logon until he gets "lucky."



The connection of the PHD to the user's PC is quite straightforward. When the casino gives the PHD to the user, the casino will also instruct the user to go to a specific location on the casino's web site that will be connected to the wagering host. This location will automatically download and install a software driver for the PHD, if it has not previously been installed.

Thereafter, the user simply plugs the device into the PC's serial or USB port before turning on the PC. Currently available operating systems software such as Microsoft Windows will identify the new device and load the appropriate software.

The flow of information between the PHD, PC and host is essentially invisible to the user, except when the user is required to enter the sequence of data into the PHD and his PIN into the PC as previously described.

The PHD is a self-contained device which includes an external antenna to receive GPS satellite signals, a connector to the serial or USB port of a personal computer. The driver running in the PC enables the PHD to communicate with the host using the PC's connection to the network. It is powered over the serial/USB link and includes:

GPS system chip 61 as described above

Keypad 63 as described above.

Read only memory (ROM 65) to hold the program logic for the GPS system, the keypad management, encryption/decryption and external communication with the host and local PC. The necessary programming can be easily created by a person of ordinary skill in the art based on the description provided herein.

CPU 67 such as a SAA1570HL available from Philips Semiconductor.

Flash memory 69 to store the 128-bit key and encrypted serial number.

Random access memory (RAM 71) to hold downloaded information pertinent to the current session.

Although the present invention has been described in terms of certain preferred embodiments, other embodiments apparent to those of ordinary skill in the art are also within the scope of this invention. In this connection, while having particular application in a wagering environment, the invented system and method could be used whenever geographic location and mental state need to be determined before allowing a remote user access to a host computer. Accordingly, the scope of the invention is intended to be defined only by the claims that follow.

## CLAIMS

We Claim:

- 1           1.     A verification system comprising:
  - 2           a)     a GPS circuit to generate signals representing a geographic location;
  - 3           b)     means for connecting the system to a network;
  - 4           c)     means for connecting the system to a local computer coupled to said  
5 network;
  - 6           d)     a keypad having a plurality of keys;
  - 7           e)     logic means for:
    - 8           i) communicating with a remote host computer coupled to said network  
9 and with said local computer;
    - 10           ii) receiving key sequence information from said remote host computer;
    - 11           iii) determining if an attempt has been made to enter a key sequence using  
12 said keypad within a predetermined period of time, and if yes, sending said entered key  
13 sequence, a serial number and geographic information provided by said GPS circuit to  
14 said host computer.
- 1           2.     A verification system comprising:
  - 2           a)     a GPS circuit to generate signals representing a geographic location;
  - 3           b)     means for connecting the system to a network;
  - 4           c)     means for connecting the system to a local computer coupled to said  
5 network;
  - 6           d)     a keypad having a plurality of keys, each key having a changeable color or  
7 symbol;
  - 8           e)     logic means for:
    - 9           i) communicating with a remote host computer coupled to said network  
10 and with said local computer;
    - 11           ii) receiving key sequence information from said remote host computer;
    - 12           iii) after a key has been depressed, changing a color or symbol associated  
13 with each of said keys based on said received key sequence;
    - 14           iv) determining if an attempt has been made to enter a key sequence using  
15 said keypad within a predetermined period of time, and if yes, sending said entered key

16 sequence, a serial number and geographic information provided by said GPS circuit to  
17 said host computer.

1 3. A method for verifying location of a user comprising the steps of:  
2 a) communicating with a remote host computer coupled to a network and  
3 with a local computer coupled to said network;  
4 b) receiving key sequence information from said remote host computer;  
5 c) determining if an attempt has been made to enter a key sequence using a  
6 keypad within a predetermined period of time, and if yes, sending said entered key  
7 sequence, a serial number and geographic information provided by a GPS circuit to said  
8 host computer.

1 4. A method for verifying location of a user comprising the steps of:  
2 a) communicating with a remote host computer coupled to a network and  
3 with a local computer coupled to said network;  
4 b) receiving key sequence information from said remote host computer;  
5 c) after a key of a keypad has been depressed, changing a color or symbol  
6 associated with each key of said keypad based on said received key sequence;  
7 d) determining if an attempt has been made to enter a key sequence using  
8 said keypad within a predetermined period of time, and if yes, sending said entered key  
9 sequence, a serial number and geographic information provided by a GPS circuit to said  
10 host computer.

1 5. The system defined by Claim 1 wherein said GPS circuit operates to  
2 communicate with GPS satellites and generate a latitude and longitude of said GPS circuit  
3 using signals received from said satellites.

1 6. The system defined by Claim 1 wherein said means for connecting the  
2 system to a network comprises one of a serial port and a USB port.

1 7. The system defined by Claim 1 wherein said means for connecting the  
2 system to a local computer comprises one of a serial port and a USB port.

1           8.     The system defined by Claim 1 wherein each of said plurality of keys  
2 comprises at least one LED.

1           9.     The system defined by Claim 1 wherein said logic means comprises a  
2 computer program executed by a processor.

1           10.    The system defined by Claim 2 wherein said GPS circuit operates to  
2 communicate with GPS satellites and generate a latitude and longitude of said GPS circuit  
3 using signals received from said satellites.

1           11.    The system defined by Claim 2 wherein said means for connecting the  
2 system to a network comprises one of a serial port and a USB port.

1           12.    The system defined by Claim 2 wherein said means for connecting the  
2 system to a local computer comprises one of a serial port and a USB port.

1           13.    The system defined by Claim 2 wherein each of said plurality of keys  
2 comprises at least one LED.

1           14.    The system defined by Claim 2 wherein said logic means comprises a  
2 computer program executed by a processor.

1           15.    The method defined by Claim 3 wherein if said determining step  
2 determines that said entered key sequence was not entered within said predetermined  
3 period of time, a message to that effect, said serial number and said geographic  
4 information provided by a GPS circuit are sent to said host computer.

1           16.    The method defined by Claim 4 wherein if said determining step  
2 determines that said entered key sequence was not entered within said predetermined  
3 period of time, a message to that effect, said serial number and said geographic  
4 information provided by a GPS circuit are sent to said host computer.

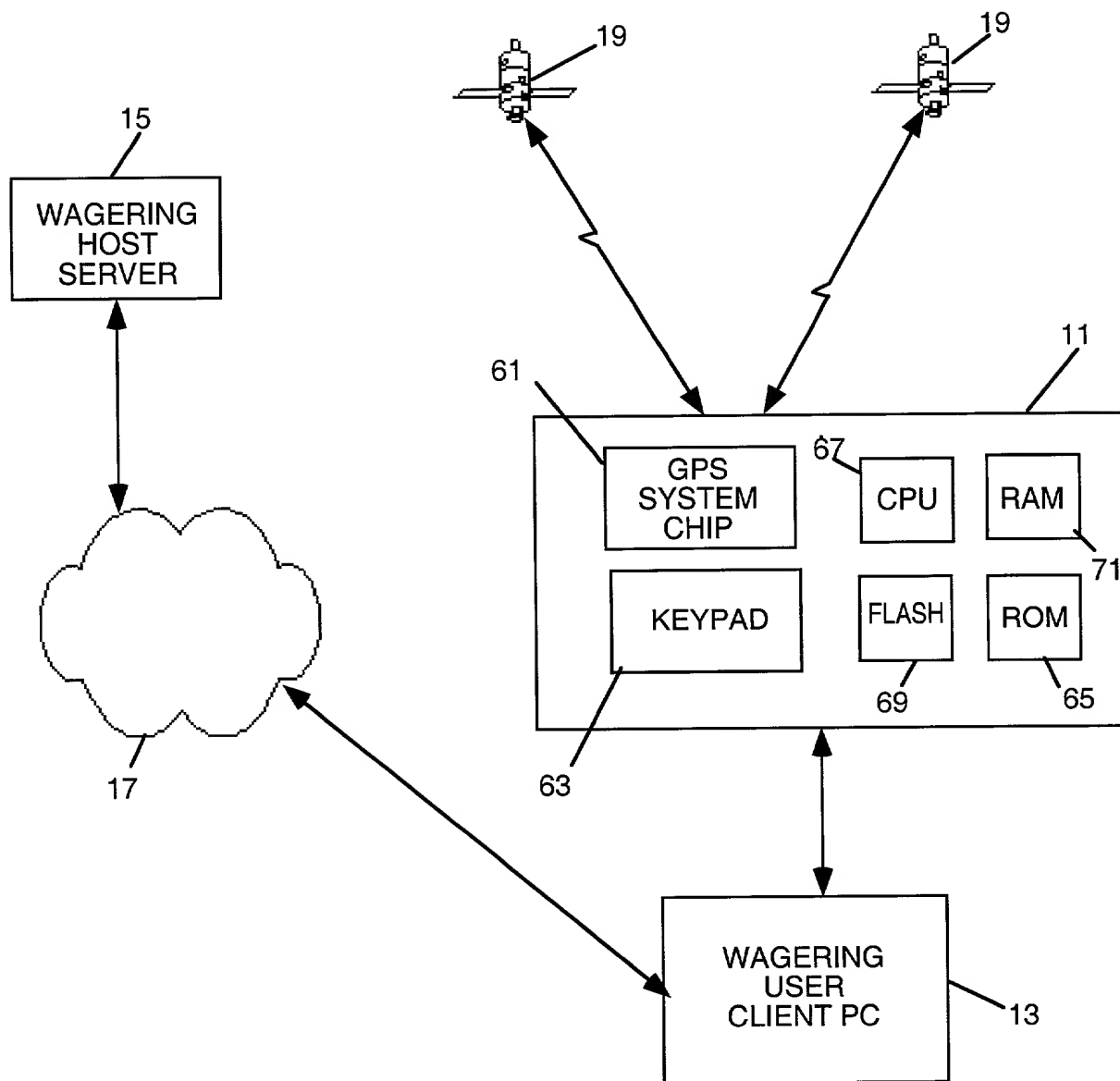
1           17.    A method for verifying location of a user comprising the steps of:

- 2           a)       communicating with a remote computer coupled to a network and with a
- 3       verification system coupled to said remote computer;
- 4           b)       receiving an assigned personal identification number entered by a user at
- 5       said remote computer and verifying the received personal identification number is valid;
- 6           c)       if the received personal identification number is valid, transmitting key
- 7       sequence information to said remote computer for use by said remote computer and said
- 8       verification system;
- 9           d)       receiving entered key sequence information, a serial number and
- 10       geographic information provided generated by said verification system;
- 11          e)       validating the received key sequence information, serial number and
- 12       geographic information by comparing the received information with expected key
- 13       sequence information, serial number and geographic information;
- 14          f)       accepting an entered wager if said received information is validated.

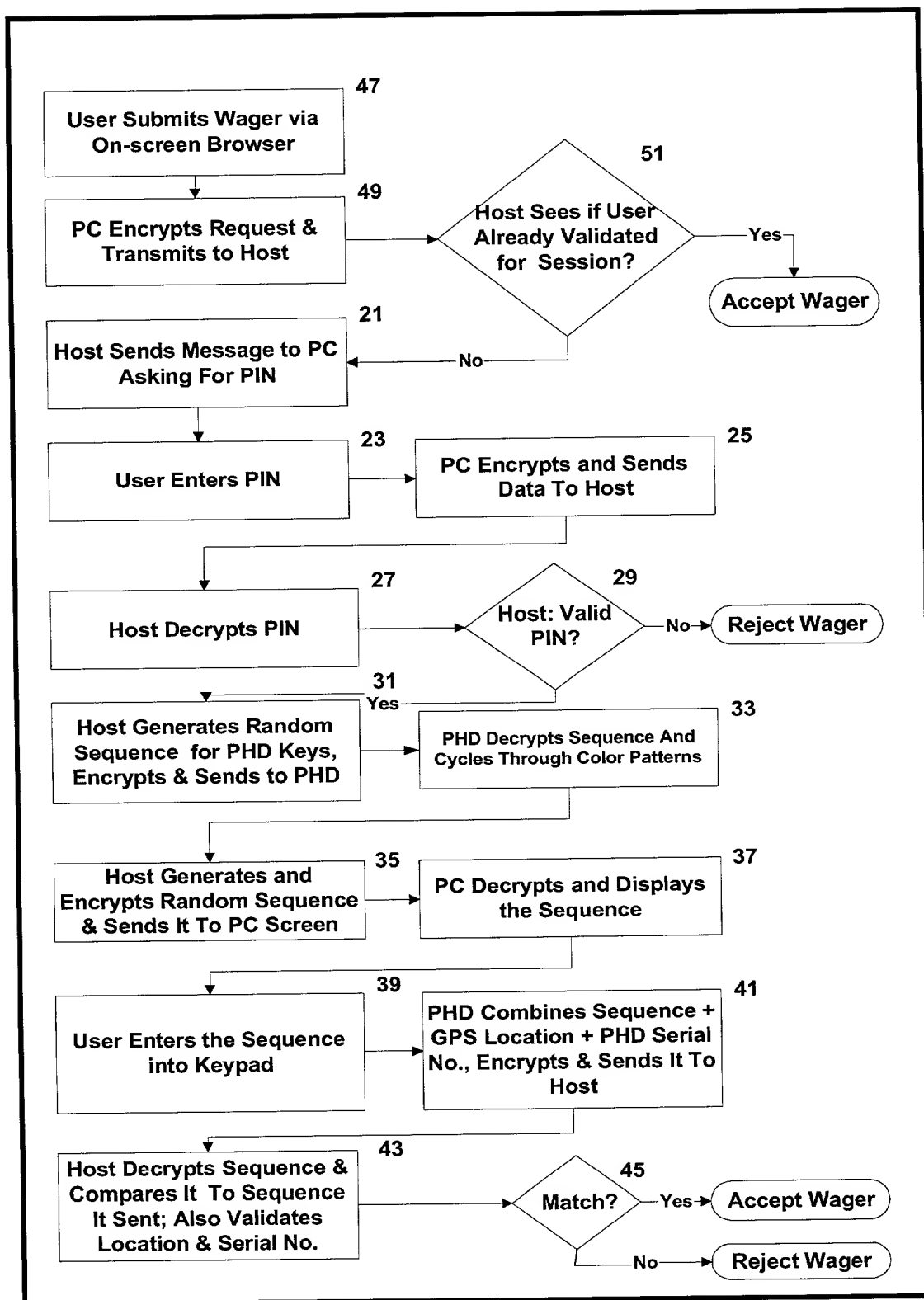
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**ABSTRACT**

A method and system for determining geographic location and mental state of a user. A GPS circuit is to generate signals representing a geographic location. The system uses a host computer and a local computer connected to each other over a network. A keypad is used to enter provided sequence information which is sent to the host computer if entered within a set period of time along with geographic location information provided by a GPS system and serial number information. The host computer verifies that the sequence information, serial number and geographic location information are as expected and if so, allows a user access to certain information provided by the host system.



**Fig. 1**



## Figure 2



### Figure 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

PHILIP SMITH BECKER, JR., ET AL.

Application No.:

Filed:

For: **METHOD AND APPARATUS FOR  
ONLINE GEOGRAPHIC AND USER  
VERIFICATION AND RESTRICTION  
USING A GPS SYSTEM**

Art Group:

Examiner:

Assistant Commissioner for Patents  
Washington, D.C. 20231

**TRANSMITTAL OF FORMAL DRAWINGS**

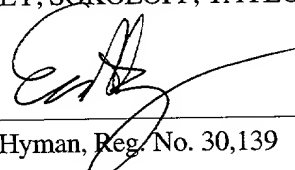
Sir:

Enclosed herewith for filing in the above-identified U.S. Patent Application are the formal drawings, 3 sheets including 3 Figures. Applicant hereby authorizes any additional extension or petition fees under 37 C.F.R. §1.17 or credit for any overpayment to our Deposit Account No. 02-2666. A copy of this sheet is enclosed.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: 11/17/2000

  
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00275456

In re the Application of:

Art Group:

Examiner:

For: **METHOD AND APPARATUS FOR  
ONLINE GEOGRAPHIC AND USER  
VERIFICATION AND RESTRICTION  
USING A GPS SYSTEM**

## TRANSMITTAL OF FORMAL DRAWINGS

Enclosed herewith for filing in the above-identified U.S. Patent Application are the formal drawings, 3 sheets including 3 Figures. Applicant hereby authorizes any additional extension or petition fees under 37 C.F.R. §1.17 or credit for any overpayment to our Deposit Account No. 02-2666. A copy of this sheet is enclosed.

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11/12/2000

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## DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or any original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### METHOD AND APPARATUS FOR ONLINE GEOGRAPHIC AND USER VERIFICATION AND RESTRICTION USING A GPS SYSTEM

the specification of which



is attached hereto.

was filed on \_\_\_\_\_ as

United States Application Number \_\_\_\_\_

or PCT International Application Number \_\_\_\_\_

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

#### Prior Foreign Application(s):

APPLICATION NUMBER	COUNTRY (OR INDICATE IF PCT)	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

APPLICATION NUMBER	FILING DATE

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Docket No. 04144.P001

Pg :

APPLICATION NUMBER	FILING DATE	STATUS (ISSUED, PENDING, ABANDONED)

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Docket No. 04144.P001

Pg 2

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